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CHARLETT E EXECUTATION

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What is claimed is:

A method comprising:

generating a compressed medical image from a source medical image; transmitting the compressed medical image to a remote view station for display;

selecting a region of the displayed medical image; and applying image analysis operations to a region of the source medical image corresponding to the selected region of the compressed medical image.

The method of claim 1 wherein transmitting the compressed medical image includes transmitting the compressed medical image over a global packet-switched network.

The method of claim 1 and further including transmitting region information from the remote view station to an image server, wherein the region information defines the selected region of the displayed medial image.

- 4. The method of claim 3, wherein the region information is a series of pixel coordinates.
- The method of claim 1, wherein applying the image analysis operations includes outputting a score and communicating the score to the remote view station for display.

6. The method of claim 1 and further including receiving a diagnosis from the remote view station and associating the diagnosis with the source medical image in a database.

7. The method of claim 1, wherein selecting the region of the compressed medical image includes receiving input from a pointing device controlled by a user to outline the region of the compressed medical image.





- The method of claim 1, wherein generating a compressed medical image includes 8. applying a compression algorithm that reduces data losses that are detectable with human vision.
- 5 9. The method of claim 8, wherein generating a compressed medical image includes applying a JPEG compression algorithm.

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A system comprising

an image server storing a source medical image;

a remote view station communicatively coupled to the image server to receive a compressed version of the source medical image, wherein the remote view station includes an input device for selecting a region of the compressed medical image, and further wherein the image server applies an image analysis operation on a region of the source medical image that corresponds to the selected region of the compressed medical image.

- The system of claim 10, wherein the remote view station transmits region information 11. from the remote view station to the image server, wherein the region information includes a plurality of pixel coordinates outlining the selected region of the compressed image.
- The system of claim 10, wherein the image server applies the image analysis 12. operations to generate a score and communicates the score to the remote view station for display.
- The system of claim 10, wherein the image server includes a database associating a 13. diagnosis received from the remote view station with the source medical image.
- 14. The system of claim 10, wherein the remote view station includes a pointing device 30 controllable by a user to outline the region of the compressed medical image.

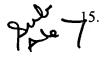
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A computer program, tangibly stored on a computer-readable medium, comprising instructions operable to cause a programmable processor to:

generate a compressed medical image from a source medical image; transmit the compressed medical image to a remote view station for display; receive region information from the remote view station, wherein the region information defines a region within the compressed medical image; and

apply image analysis operations to a region of the source medical image as a function of the region information.

- 10 16. The computer program of claim 15 and further including instructions to cause the processor to transmit the compressed medical image over a global packet-switched network.
 - 17. The computer program of claim 15 wherein the region information is a series of pixel coordinates.
 - 18. The computer program of claim 15 and further including instructions to cause the processor to output a score and communicating the score to the remote view station for display
 - 19. The computer program of claim 15 and further including instructions to receive a diagnosis from the remote view station and associate the diagnosis with the source medical image in a database.
- 20. The computer program of claim 15 and further including instructions to apply a 25 compression algorithm that reduces data losses that are detectable with human vision.
 - A computer-readable medium having a data structure stored thereon comprising: 21. a data field identifying a source medical image;
 - a data field identifying a compressed version of the source medical image; and a data field storing an output score from an image analysis operation applied to a region of the source medical image.

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22. The computer-readable medium of claim 21, wherein the data structure includes a data field associating a diagnosis with the source the medical image.

A method comprising:

compressing a source medical image at a compression level;
transmitting the compressed medical image to a remote view station for display;

receiving region information from the remote view station, wherein the region information defines a region of the compressed medical image; and

compressing a region of the source medical image at a second compression level as a function of the region information.

- 24. The method of claim 22 wherein transmitting the compressed medical image includes transmitting the compressed medical image over a global packet-switched network.
- 25. The method of claim 23, wherein the region information is a series of pixel coordinates.

The method of claim 23 and further including receiving a diagnosis from the remote view station and associating the diagnosis with the source medical image in a database.

27. A method comprising:

transmitting a medical image to a remote view station for display;

receiving region information from the remote view station, wherein the region information defines a region of the displayed medical image; and

locally applying an image processing operation at the image server to a region of the source medical image as a function of the region information.

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28. The method of claim 27 wherein transmitting the medical image includes transmitting the medical image over a global packet-switched network.





- The method of claim 27, wherein the region information is a series of pixel 29. coordinates.
- The method of claim 27, wherein transmitting the medical image includes 30. 5 compressing medical image.